

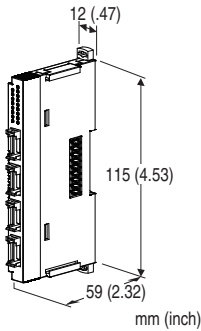
## Remote I/O R8 Series

### DISCRETE INPUT MODULE

(4 points)

#### Functions & Features

- Discrete input module (positive common) with 4 channels



### MODEL: R8-DA4A[1]

#### ORDERING INFORMATION

- Code number: R8-DA4A[1]  
Specify a code from below for [1].  
(e.g. R8-DA4A/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### [1] OPTIONS

blank: none

/Q: With options (specify the specification)

#### SPECIFICATIONS OF OPTION: Q

**COATING (For the detail, refer to M-System's web site.)**

/C01: Silicone coating

/C02: Polyurethane coating

#### GENERAL SPECIFICATIONS

##### Connection

- Input:** 4-pin e-CON connector  
PWB connector XN2D-1474-S002 (Omron)  
Recommended cable connector XN2A-1470 (Omron)  
Applicable wire size 0.08 mm<sup>2</sup> (AWG28) - 0.5 mm<sup>2</sup> (AWG20)  
Outer sheath diameter: max. 1.5 dia  
(The cable connector is not included in the package.  
Refer to the specifications of the product.)
- Excitation supply, internal bus:**  
Connected to internal bus connector
- Internal power:** Supplied from internal bus connector
- Isolation:** Input or exc. supply to internal bus or internal

power

**Module address:** With rotary switch

**Terminating resistor:** Built-in (DIP Switch, default: disable)

**Status indicator:** Bi-color (red/green) LED; Refer to the instruction manual.

**Discrete input status indicators:** Green LED; Refer to the instruction manual.

#### INPUT SPECIFICATIONS

**Common:** Positive common (NPN)

**Number of inputs:** 4

**Rated input voltage:** 24 V DC  $\pm 10\%$ ; ripple 5 %p-p max.

**ON voltage / current:**  $\geq 15$  V DC (input - 24V) /  $\geq 2.3$  mA

**OFF voltage / current:**  $\leq 5$  V DC (input - 24V) /  $\leq 1$  mA

**Input current:**  $\leq 4.5$  mA per point at 24 V DC

**Input resistance:** Approx. 5.7 k $\Omega$

**ON delay:**  $\leq 2.0$  msec.

**OFF delay:**  $\leq 2.0$  msec.

#### INSTALLATION

**Max. current consumption:** 80 mA

**Operating temperature:** -10 to +55°C (14 to 131°F)

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Atmosphere:** No corrosive gas or heavy dust

**Mounting:** DIN rail

**Weight:** 60 g (2.12 oz)

#### PERFORMANCE

**Data allocation:** 1

**Module addresses in use:** 1

**Power output (input terminal):** Rated current 0.5 A DC per channel (rated current 3 A for internal fuse (slow blow fuse  $i^2t$  (A<sup>2</sup>sec) max. 0.31); Total: 2 A DC

**Max. consumption current:** 80 mA

**Insulation resistance:**  $\geq 100$  M $\Omega$  with 500 V DC

**Dielectric strength:** 1500 V AC @ 1 minute

(input or exc. supply to internal bus or internal power to ground)

#### STANDARDS & APPROVALS

**EU conformity:**

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

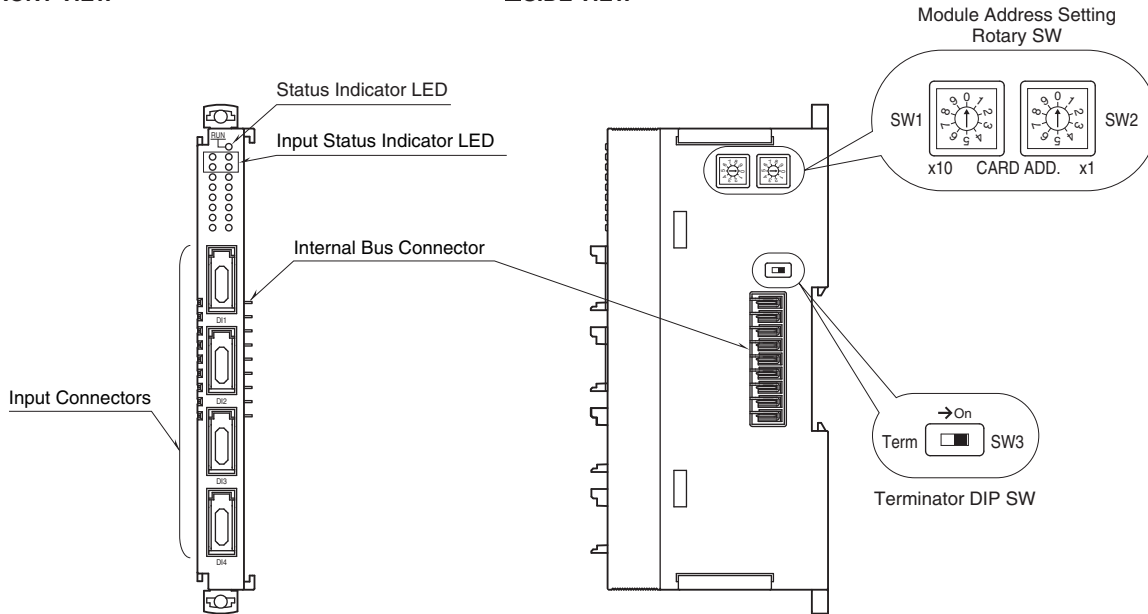
RoHS Directive

EN 50581

## EXTERNAL VIEW

### FRONT VIEW

### SIDE VIEW



## OPERATING MODE SETTING

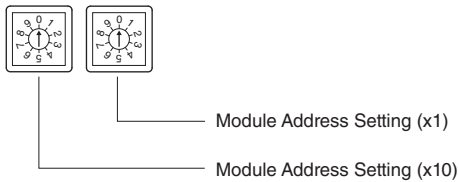
(\*) Factory setting

### Module Address

The left switch determines the tenth place digit, while the right switch does the ones place digit of the address.

Address is selected between 0 to 31.

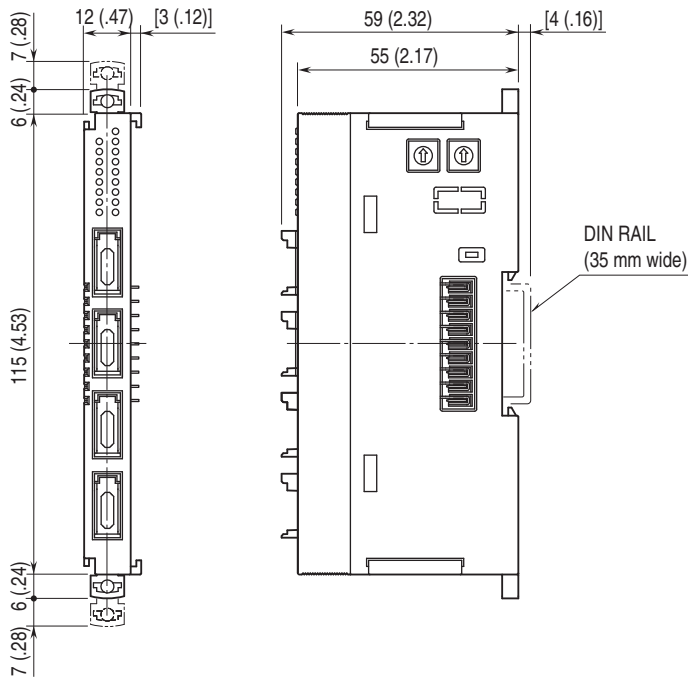
(Factory setting: 0)



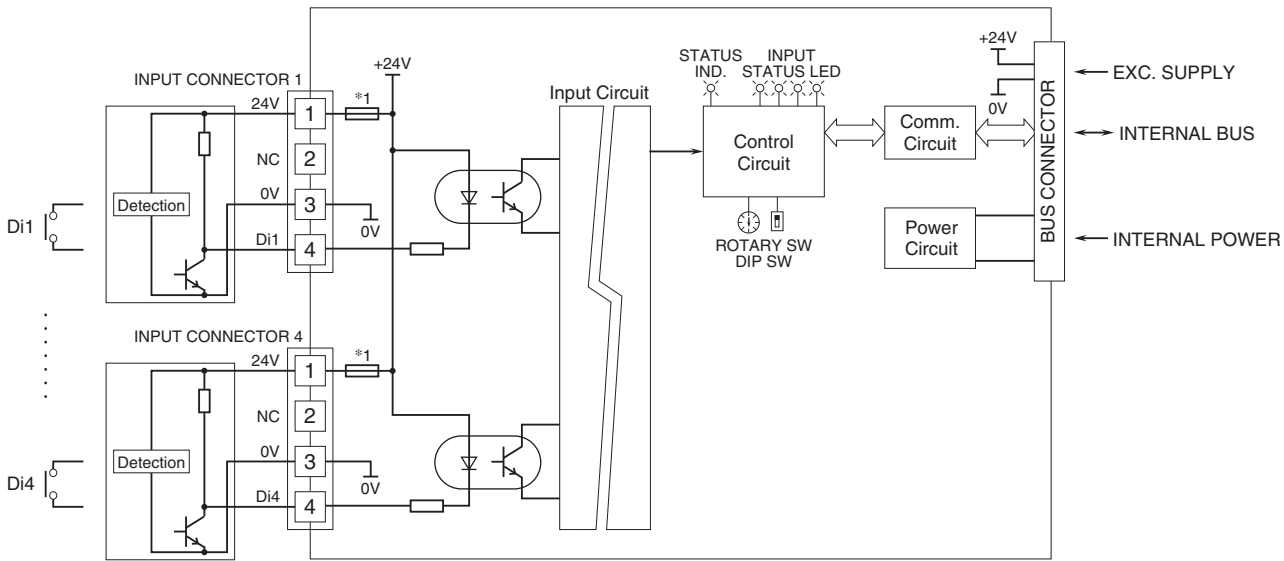
### Terminator DIP SW

TERMINATOR SW	SW3
Without (*)	OFF
With	ON

**DIMENSIONS unit: mm (inch)**



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



\*1. Fuse in not replaceable.  
 Note: For dry contact input, connect it across the terminals 3 and 4.



Specifications are subject to change without notice.